



5.0 TMP GOALS AND OBJECTIVES

The implementation of an effective TMP will require that a set of goals be established, based on which appropriate strategies are identified to reduce the existing and future vehicle trip generation and parking demand of the NNMCC campus. The proposed goals and objectives for the NNMCC TMP were developed based on the following:

- Meeting all operational and mission requirements.
- The TMP requirements and strategies presented in the *Implementing a Successful Transportation Management Program (2008)*, *Comprehensive Plan for the National Capital: Transportation Element, National Capital Planning Commission (2005)* and the *NNMCC Instruction 5560.1D Parking Management for NNMCC*.
- The baseline (Pre-BRAC or May 2008) travel characteristics of WRAMC and NNMCC employees, and potential measures to encourage positive changes in commuting modes (Section 3); and
- The projected traffic and parking impacts of the BRAC Action (Section 4).

The goals and objectives of the NNMCC TMP are as follows:

Goals

The main goals of the TMP are as follows:

- Mitigate identified adverse traffic impacts of the proposed new developments, as noted in the EIS Transportation Study.
- Influence the travel choices of the users of the NNMCC site towards reducing their potential adverse impacts on local area traffic congestion and air pollution.
- Establish an opportunity to work cooperatively with federal and local agencies, towards reducing local area traffic congestion and air pollution.
- Improve patient access and parking.
- Obtain comprehensive information needed for analysis of transportation and parking issues.



Objectives

The primary objectives of the TMP are:

- Reduce baseline (Pre-BRAC or May 2008) and future single-occupant vehicular (SOV) trips to/from the NNMC campus, particularly during weekday morning and afternoon peak periods.
- Increase Average Vehicle Occupancy (AVO) ratios from 1.12 to 3.0 by 2011.
- Increase transit mode share from 11.3% to approximately 30% by year 2011.
- Increase ridesharing mode share from 13.5% to 24% by 2011.
- Reduce parking supply and demand ratios through effective management strategies (as listed in Section 5.1). Identify TDM strategies that will allow the employee-parking ratio to reach and maintain the NCPC goal of 1 parking space for every 3 employees by 2011.
- Identify strategies that can be implemented with other local area agencies and organizations to achieve the TMP goals and objectives, as well as address local area roadway capacity and safety deficiencies.
- Reduce obstacles for patient parking (distance, signage, access, and availability) and sustain enforcement and management programs.
- Establish procedures and methods to obtain consistent transportation/parking information and data.

5.1 Current Transportation Management Plan Program

Progress on achieving the goals of the TMP is well under way. Below is a list of NNMC's current Transportation Management Plan's Programs and Features:

- Transportation Program Manager: The full-time position was filled in March of 2008 and was established to coordinate and administer the Transportation Management Plan. All of the current programs will be maintained with a strong emphasis on implementing the future programs within the prescribed timelines. The Transportation Program Manager is responsible for compiling data for the annual "State of the Union" report and presenting to the Command for review, comment and action. The position has direct access communication to the Director for Administration (DFA) who has responsibility over all facilities, transportation, security and parking related items on the campus. The DFA reports to the Deputy Commander. The Deputy Commander reports to the Commander who has jurisdiction over the operations of NNMC and Navy Medicine National Capital Area (NMNCA).



- Mass Transportation Fringe Benefit (MTFB) Program: The MTFB Program is managed by the Washington Headquarters Services (WHS) who is assisted by the Department of Transportation (DOT) in its implementation. The service is provided to both military and civilian staff. Civilians not employed by the Federal Government are not eligible, but contractors who employ these civilians are strongly encouraged to provide this service at NNMC. Employees are reimbursed up to \$115 per month, as of 2008, for their mass transportation expenses. Program participants are eligible to receive Metrocheks distributed by the Department of Transportation (DOT) on a monthly basis at NNMC. Program participants may also pick up their Metrocheks at the Pentagon or Navy Yard Metro Shop during normal business hours. The Metrocheks can be used on any of the established mass transit systems, such as the Metrorail, Metrobus, MARC, VRE, Commuter Buses and registered vanpools. In order to receive the MTFB the program participants must submit their application to WHS, surrender any previously issued parking sticker or permit and receive notification from WHS that their application has been approved. Approximately 1,180 Metrocheks were distributed at NNMC in the first quarter and 1,280 in the second quarter of 2008. Approximately 1,500 Metrocheks were distributed at Walter Reed during the first quarter of 2008.
- Town Hall Meetings: There are weekly town hall meetings held at NNMC for key leadership to review the latest information related to BRAC and non-BRAC related construction. The Transportation Program Manager is responsible for updating the leadership on a number of items to include changes to pedestrian or vehicular access, loss of parking due to various phases of construction or special events and alternative commuting solutions to single occupancy vehicles (SOV's). The town hall meetings also provide a question and answer session after the presentation to address any concerns or clarify new information for the leadership staff. In addition, recaps of the town hall meetings are provided via email, and at literature racks located throughout the hospital, for the entire staff to review. This information is another medium to educate staff on alternative commuting options.
- Commuter Solutions Intranet Website: NNMC provides the staff with a Commuter Solutions website. The purpose of the website is to educate the staff on alternative commuting solutions and to provide the latest information on parking and transportation related projects and disruptions.

The website is divided into six main sections: Frequently Asked Questions (FAQ's), Traffic Cameras & Construction Projects, Commuter Options, Internal and External News, Resources and Gate Schedules/Base Maps. The FAQ's section provides a detailed list of frequently asked questions and answers which have been accumulated from prior Town Hall Meetings, email and phone inquiries to the Transportation Program Manager. Main topics include the MTFB program, Ridesharing and the Guaranteed Ride Home Program. The Traffic Camera and



Construction Project section provides live feeds to MD, VA and DC cameras and updated information on regional transportation construction projects. These sites allow staff members to make informed decisions about their weekly commute to and from NNMC. The Commuter Options section lists all available possibilities for commuters to consider other than SOV travel to include Regional Bus, Commuter Rail, Commuter Bus, Ridesharing and Biking. The Internal and External News section provides the staff detailed information such as events which may cause traffic congestion or loss of parking, updates to the base shuttle system and internal construction projects which may change the flow of pedestrian or vehicular traffic. The Resource section offers a number of items to include how to sign up for transit service alerts from various regional transportation services and utilizing WMATA's route planning tool to seamlessly integrate local and regional services into one easy to execute trip itinerary. Finally, the Gate Schedules/Base Maps section provides updated gate entry hours of operation and campus maps which show shuttle routes and available parking locations for patients, visitors and staff.

In addition, there is also a Commuter Solutions section on the NNMC internet website for staff members who may work at NNMC, but do not have access to the NNMC intranet website. The Transportation Program Manager is responsible for maintaining both websites and has been provided dedicated personnel from the IT/Web and Public Affairs department to ensure timely updates of new information.

- Employee Orientation: A key aspect of starting any new position is a comprehensive orientation program. As a military facility, NNMC has a significant number of staff who will spend a tour or specified period of time at the campus. Therefore, it is a continuous educational process for new staff members that must be adhered to in order to advance the goals of the TMP. The Transportation Program Manager presents at the incoming staff orientation on a bi-monthly basis. The focus of the transportation presentation is to introduce to the staff the resources that are available to help them determine the best mode of commuting to NNMC. In addition, at the end of the presentations there is an Expo set up outside of the auditorium showcasing the various presenters. The Expo allows the Transportation Program Manager to provide commuter materials and promotional items to increase interest and awareness of mass transit, ridesharing, flex time/compressed work week and telecommuting programs.
- Alternative Work Schedules/Variable Work Hours: Those employees who are eligible could participate in these strategies which allow the adjustment of travel schedules to avoid morning and afternoon peak period traffic congestion. Given that 40% of all families report scheduling conflicts with the traditional work day, variable work hour programs are an attractive alternative. Several demographic and economic changes have made variable work hours programs more practical. These changes include: the influx of women into the labor force, the



increase in multiple worker families with multiple demands, the growing number of single parents, and the need for flexibility on part of a large aging population. The three most popular strategies include:

- Flextime: Employees can select their arrival and departure times and length of their lunch period. They work eight hours (not including lunch break) and have to be in the office during a core period.
- Compressed Work Week: Employees can complete the number of weekly hours in fewer days per week. Common deviations include a four-day work week, or working 80 hours in nine days and taking the tenth day off.
- Staggered Work Hours: The employer staggers the arrival and departure time of groups of employees so that employees do not all arrive and leave work at the same time.

For the federal agency and its employees, variable work hour programs provide the following benefits:

- Reduced traffic congestion during peak hours,
- Reduced peak hour bus overcrowding by spreading peak trips,
- Increased productivity,
- Reduced operating costs (for the day off),
- Reduced staff turnover and improved recruiting,
- Extended customer service hours,
- More flexibility for employee personal needs,
- Reduced commuting time by shifting trips to off-peak hours,
- Increased job satisfaction,
- Occasional three-day weekends,
- Improved air quality by eliminating some commute trips,
- Increased transit use as a result of permitted schedule changes for employees,
- Facilitated child care and ridesharing (flextime), and



- Better communication across time zones.

In addition to reducing peak period vehicle trips (i.e., shifting these trips to other off-peak times), flextime and compressed work week strategies may reduce the total number of vehicular trips. Flextime suits most government operations and is highly successful in the Washington metropolitan region. Flextime schedules are particularly useful for agencies that need to communicate with other time zones or need extended hours of operation.

Currently, a significant amount of NNMC employees participate in a compressed work week program. There are limitations for this program as some staff positions are directly assigned to patient care and students also will not be eligible. However, it is important to note that the 2007 survey data showed that 17% of the staff at NNMC and 55% of the staff from WRAMC would be willing to consider a flexible work schedule if it were available. Therefore, the Transportation Program Manager works closely with the NNMC DFA, the NNMC Director of Human Resources and campus tenant commands (USUHS, AFRRRI etc) to identify staff members who would be eligible for this program. This effort includes the education of those staff members on the benefits of flextime/compressed work week programs and coordination with their department heads to ensure that eligible candidates are provided the opportunity to pursue these programs. The goal for the Transportation Program Manager is to increase participation in this program by year 2011.

- Telecommuting: The May 2008 TMP Handbook indicates that “Telecommuting is becoming increasingly popular in corporate America. According to the American Interactive Consumer Survey conducted by The Dieringer Research Group (2004) there are 44.4 million people teleworking at least 1 day per week. The American Interactive Consumer Survey estimates that there will be over 100 million teleworkers by 2010. Telecommuting refers to the option of working at home or at an office close to home on a full or part-time basis. Although computers and other telecommunications technologies facilitate telecommuting, the telephone is still the most basic tool for working at an alternative location.” The popular forms of telecommuting are as follows:
 - Work-from-home: This is the most common and the least expensive form of telecommuting.
 - Satellite Work Center: This form of telecommuting refers to an arrangement whereby an employer provides some of its employees with the option of working at an alternative office located closer to home. Satellite work centers are usually housed within the existing company infrastructure. Often, when an employee works at a satellite work center, their supervisor and co-workers are still reporting to the normal work site. A complete list of Telework Centers can be found at the Commuter Connections website (www.commuterconnections.org).



The benefits of telecommuting to employers, employees, and the community are as follows:

- Increased productivity as a result of fewer distractions, continuous work time;
- Improved morale and employee satisfaction;
- Decreased absenteeism based on the ability of employees to work in spite of emergencies, such as car trouble or weather conditions;
- Improved recruitment and ability to retain skilled workers;
- Opportunity to expand hiring to include the handicapped and others unable to meet traditional working hour requirements;
- Decreased overhead in times of office expansion;
- Reduced employee commuting time, stress and cost;
- Reduced trips to the central work site resulting in reduced VMT (i.e., less traffic congestion, air pollution, and highway cost); and
- Increased ability for business continuity in the event of a natural or man-made disaster.

Some employees, whose jobs allow working remotely, are given the opportunity to participate in this program. This is limited to administrative staff only since patient care requires a physical presence. Currently, the number of staff who telecommute/telework at NNMC is minimal. Therefore, the Transportation Program Manager works closely with the NNMC DFA, the NNMC Director of Human Resources and campus tenant commands (USUHS, AFRRRI etc) to identify staff members who would be eligible for this program., educates them on the benefits of telecommuting and coordinates with their department heads to ensure that eligible candidates are provided the opportunity to pursue this program. The goal for the Transportation Program Manager is to increase participation in this program by year 2011.

- Ridesharing (Carpool and Vanpool): Carpooling occurs when two or more people share a ride in a private vehicle. Carpools generally consist of persons who live in the same neighborhood or along the same route, and use a private vehicle to reach a common or nearby destination. Complementary measures include: Commuter Connections rideshare matching program, preferential parking for carpools and vanpools, guaranteed ride home program, marketing efforts and GoDCgo.com.

Vanpooling is an arrangement where several people (7 - 15) share a ride between home and work in a van. For the purpose of employer subsidies, a vanpool should have a seating capacity



of at least 6 adults (not including the driver). At least 80 percent of the van mileage should be for transporting employees between their residences and place of employment. It is also required that van use is with at least $\frac{1}{2}$ of its passenger capacity (the van drive does not count towards this requirement). Vanpooling is ideal for employees who live at least 15 miles from the work place. The regional average trip length of vanpools is 29 miles. The two types of vanpooling programs that will be utilized at NNMCMC are as follows:

Third Party Vans: A group of employees lease a van from a vanpool vendor and fares are paid to the vendor by the employees.

Owner-Operated Vans: An individual employee independently buys a van and administers all aspects of the program.

A federal agency and its employees can benefit from vanpooling as follows:

- Employee productivity is enhanced as a result of reduced commuting stress;
- Tardiness is minimized because the driver and riders must maintain a reliable schedule to maintain a successful vanpool, which will in turn allow them to consistently meet an agency's start schedule;
- Morale and general satisfaction with work increases;
- Employer/federal agency savings are achieved because of reduced parking expenditures;
- Savings in commute time result when used with High Occupancy Vehicle (HOV) or High Occupancy Toll (HOT) lanes;
- Employees benefit from savings in commuting costs;
- Employees gain increased "down" time on the van/bus to read, sleep, or work;
- Congestion is reduced, since each van can remove as many as fourteen other vehicles from the road; and
- Air quality is improved, since one van pool reduces up to 275 pounds of pollution every day.

Vanpools can be formed only if an adequate number of employees with similar work schedules live near each other, and is only cost effective for long distance commuters who live at least 15 miles away from the office. An employee spatial distribution study that shows the location of where employees live in relation to the work place is one way to determine the vanpooling



potential at a worksite.

Complementary measures to vanpools include preferential parking for carpools, the Guaranteed Ride Home Program (administered by the Metropolitan Washington Council of Governments), the regional rideshare-matching program (administered by the Metropolitan Washington Council of Governments and its network members), driver training programs, flextime and GoDCgo.com.

The NNMC Transportation Program Manager promotes employee participation in carpooling and vanpooling. NNMC employees interested in a carpooling or vanpooling are directed to the web link for Commuter Connections which is a network coordinated by Metropolitan Washington Council of Governments (COG). This allows users to access a regional database of commuters and gives an opportunity to NNMC employees to find a match for their commute not only from within NNMC but also from other institutes and offices in the Bethesda – Chevy Chase area.

NNMC employees would have access to the kiss-and-ride facility at the Medical Center Metrorail Station which will be improved by WMATA to provide greater capacity. Additionally, NNMC is planning to develop a Kiss-and-Ride area (potentially along Jones Bridge Road near the Navy Exchange and CDC) to help promote carpool/vanpool options with drivers who are not NNMC staff members. Increased use of the kiss-and-ride facility is expected to increase the walk/drop-off modal percentage. In addition, it should reduce drop-off along the adjacent roadways.

Currently, about 13.5% of NNMC and 8% of WRAMC staff members participate in ridesharing programs. Other data retrieved in the surveys indicates that there is a strong interest for staff members to participate in this program. In the WRAMC survey, 34% of staff members indicated that they are unwilling to consider carpooling because they did not have anyone to ride with. Expectations for the ridesharing program are high as there is a strong belief that education of ride-matching resources would assist with the progress of this program. The goal for the Transportation Program Manager is to increase NNMC participation in ridesharing to 24% by year 2011.

- Local and Regional Transportation Involvement: There are a number of organizations and committees that NNMC attends in order to remain abreast of current transportation trends. Involvement in these meetings is critical to understand how implemented changes may affect the NNMC staff or to support programs and initiatives which may assist in providing new and innovative alternatives to SOV commuting. The Transportation Program Manager currently attends these functions:

- Medical Center Transportation Organization (MTO): This organization is comprised of



the Bethesda Transportation Management Group, NNMC, USUHS, NIH and Suburban Hospital. The group initiates and coordinates traffic and parking demand management programs in keeping with local and regional traffic and pollution reduction goals. It has initiated programs to encourage employee use of public transportation and to foster ridesharing. The County and the Washington Metropolitan Area Transit Authority (WMATA) contribute to the funding of this organization's operations. The meeting is held quarterly.

- Keep Montgomery County Moving: This organization is overseen by the Montgomery County Department of Transportation and brings together services within the Montgomery County Department of Transportation (ex. Ride On), other agencies, private officials, employers and citizens to discuss ways to improve regional traffic flow while meeting pollution and energy goals. The meeting is held quarterly at the Montgomery County Government offices.
- MWCOG – Commuter Connections Ridematching Committee: The meeting is held quarterly at the MWCOG headquarters in downtown Washington. The meeting is attended by transportation representatives from each of the counties, regional transit services, a few employers within the national capital region and citizens. The primary objective of the meeting is to discuss the Commuter Connections Ride-matching program, review the success of initiatives which have been taken and solicit feedback from the attendees on how to improve the current system.
- MWCOG – Commuter Connections Subcommittee: The meeting is held bi-monthly at the MWCOG headquarters in downtown Washington. The meeting is attended by transportation representatives from each of the counties, regional transit services, a few employers within the national capital region and citizens. The primary objective of the meeting is to review current transportation demand management programs, discuss initiatives for future programs and to solicit feedback from the attendees on how to improve the current system.
- MWCOG – Regional Bus Subcommittee: The meeting is held monthly at the MWCOG headquarters in downtown Washington. The meeting is attended by transportation representatives from each of the county and regional bus providers and a few employers within the national capital region. The primary objective of the meeting is to discuss long range plans to seamlessly connect local and regional bus services, discuss initiatives for future programs and to solicit feedback from the attendees on how to improve the current system.
- Parking Management: Priority parking spaces are provided to employees arriving by carpool or



vanpool. The web page on the NNMC website, *Commuter Solutions*, lists the currently assigned preferential parking spaces reserved for carpoolers. Furthermore, there is a coordinated effort between the NNMC Transportation Program Manager, the NNMC Security Director and tenant commands to ensure that the appropriate individuals are parking within the proper parking spaces. For example, NNMC security monitors all traffic which enters the patient/visitor parking garage from 5:00 AM - 1:30 PM, Monday through Friday. Staff members are unable to park within this garage at this time. As a further deterrent to ensure that only patient/visitor parking is contained within this garage the Transportation Program Manager is currently receiving quotes and reviewing options for parking control systems to include a ticket validation system. A determination on the feasibility of installing this type of system will be made no later than December of 2010. Future patient/visitor parking areas will also be monitored by security at the entrance points and further consideration will be given to installing parking control technology. In addition, there are a number of other parking categories outside of staff parking which have been mentioned throughout the Master Plan, to include retail, students, government vehicles, temporary residents and permanent residents. All of these reserved designations will either have special parking permits/hanging tags (as in the case of permanent residents and temporary residents) or reserved signs indicating those who are eligible to park within these spaces (sometimes accompanied by an appropriate sticker or dashboard permit). NNMC Security, in coordination with the Transportation Program Manager and the Tenant Commands, monitors these parking designations to ensure compliance. NNMC Security performs random inspections of particular areas and follows up on internal complaints which have been filed. Failure to comply with these parking regulations has and will incur an appropriate warning or fine for the offender.

- Shuttle Bus Services: The NNMC shuttle bus services (noted in Section 2) will be enhanced with the improvements illustrated in the Master Plan. Ten to fifteen minute peak period shuttle headways will be provided together with transit stop amenities including striving for real-time shuttle bus arrival information, posted transit route maps and schedules, new signs to clearly identify shuttle bus stops, and shelter and seating on all area shuttle routes will enhance the user experience and make the shuttle system more attractive to non-users. The majority of the changes discussed are already in progress and will be implemented within the next year.
- Literature and Brochure Racks: The Transportation Program Manager has acquired and filled brochure and literature racks at high traffic areas throughout the hospital. These racks contain brochures and schedules from county and regional transit providers. In addition, there is literature provided from Commuter Connections which details Live Near Your Work, Bicycling, Ridesharing and Guaranteed Ride Home programs. Furthermore, recaps of the Town Hall meetings are provided which detail the hot communication topics for the week. The information has been very well received by the staff and the Transportation Program



Manager will ensure that the brochures are current and plentiful.

- Bicycle/Pedestrian Facilities: Several existing buildings are provided with bike racks and/or showers for bicyclists and walkers. These include the BEQ's, Comfort Zone, Patient Garage, Joint Task Force (JTF) and Staff Garage. In order to encourage bicycling to and from the campus, new bike racks were installed within the staff garage. This location provides premium parking for bicyclists due to its close proximity to the hospital and its protection from inclement weather. Additional bike racks will be installed within close proximity to the hospital, or major work centers, as the need dictates. The new buildings will include bike racks as part of their Leadership in Energy and Environmental Design (LEED) Environmental Screening Criteria. A bike-sharing vendor may be considered at some time in the future, considering that the best location for this service is the Medical Center Metro Station.

The Transportation Program Manager will consider the following factors when implementing bicycling and walking as a TMP strategy:

- Provide special attention to bicycle facilities when overnight storage is required or bicycles need to be left at transit stations.
- Currently, certain buses and Metrorail trains are equipped to transport bicycles. Collect and disseminate specific information on availability. Also, WMATA does not currently allow bicycles to be transported on trains during their rush periods from 6:00-9:00 AM and from 3:00-7:00 PM Monday-Friday (except holidays).
- goDCgo.com, a clearing house for alternative travel modes including bicycling information for Washington, DC, is an invaluable resource when planning alternative commute options in Washington, DC.
- Contact local Bike/Walking Clubs to help educate bicyclists and pedestrians on safety precautions such as: always riding with traffic, wearing a helmet, watching out for car doors, wearing reflective clothing when it is dark outside, etc.
- On days of poor air quality, encourage employees who are bicyclists and walkers to use another commute alternative. The current regional air quality forecast and ozone alerts may be accessed through Clean Air Partners.
- If the work site is located in a remote or unsafe area, encourage walkers to walk in groups and during day light hours.
- Provide adequate bicycle storage and shower and locker facilities at the worksite.



- Provide adequate information regarding regional and local bicycle paths and travel routes on the agency website and/or through brochures and maps. There are bicycle-specific maps available at most map and book stores, and the Washington Area Bicyclist Association (WABA) provides facility information, maps, tips, and support. A list of bicycle maps and trails can be found in the Commuter Connections Resource Directory. Commuter Connections will offer a regional bicycling route-finding service. Encourage bicyclists to use this tool to help find a safe and dependable route to work.
- Participating in the Washington area's annual Bike-to-Work Day is a good way to introduce employees who are not regular bicyclists and/or do not usually bicycle to work, to this form of travel. Bike-to-Work Day is usually held each year in the spring.
- Guaranteed Ride Home: A Guaranteed Ride Home (GRH) program is used to provide reliable, convenient and free emergency ride home from work for commuters who regularly carpool, vanpool, bicycle and walk, or take transit to work. The most common transportation options for GRH programs include:
 - **Taxi service:** This is a subsidized service; most taxi companies bill the employer directly.
 - **Short term auto rental:** This is most appropriate for employees who need to travel more than 40 miles from the work site.
 - **Shuttle services:** Some airport shuttles serve the GRH market. Dial-a-Rides are also an option.
 - **Public transit:** An accessible bus or rail service may also present a viable option.

MWCOG offers a comprehensive GRH service under the Commuter Connections Program. This program is used by many employers, and federal agencies can take utilize the program. For employers, a GRH program can improve the ridesharing program and reduce the need for parking spaces. Additionally, this type of program encourages employees to rideshare without worrying about working overtime or attending to personal emergencies. Employees are generally receptive to GRH programs. The existence of the program can increase interest in the other elements of the TMP by encouraging commuters with an initial interest in GRH program to explore various alternative commute options.

The Transportation Program Manager has promoted this program through the Commuter Solutions website, Town Hall discussions and brochures provided by Commuter Connections at literature racks located at high traffic areas throughout the hospital. The WRAMC commuter survey identified that the number one incentive for staff members to consider carpooling would



be the implementation of a Guaranteed Ride Home Program.

- Shared Vehicles: NNMC currently has some DoD vehicles on campus that are provided to employees who rely primarily on public transportation or alternative travel modes but require a vehicle to make official trips or special personal trips to areas not accessible via transit. NNMC will provide more of such government owned vehicles in the future under the label “motor pool”. The additional vehicles will be added as the demand increases with the realignment of NNMC and WRAMC.
- Delivery and Service Vehicles: Delivery and service trips are scheduled to occur outside the AM and PM commuting peak periods of the adjacent roadways, as much as possible.
- Patient Surveys: The NNMC Customer Advocacy Group conducts periodic surveys to identify the levels of satisfaction with the patient parking experience. These surveys will be reviewed with the Transportation Program Manager to develop plans and initiatives to address areas of opportunity. Patient satisfaction is a primary mission goal.

5.2 Future TMP Strategies and Implementation

In order to achieve the above-stated TMP goals and objectives, the NNMC will make a significant, aggressive effort to enhance and implement the existing strategies noted above. Future measures would include the following:

- Smart Parking Systems: The Transportation Program Manager will explore the possibility of implementing smart parking measures for current and future parking facilities. These measures would provide the necessary information to patients, visitors and staff members to efficiently and quickly park on the available facility. In addition, the measures reduce driver frustration, carbon emissions, fuel consumption and traffic congestion. The potential measures include facilities restricting access to designated users by use of electronic identification cards and others which reduce inefficient circulation by providing display boards that show the available capacity of each garage floor and each surface lot. The Transportation Program Manager will complete review of this project by no later than December of 2010.
- Ridesharing (Carpool and Vanpool): While ridesharing is a current TMP strategy there are some different strategies which will be implemented to assist in reaching the future goals. Most importantly will be the “Zip Code Get Togethers”. These are social gatherings established by the Transportation Program Manager in order to pair-up potential carpoolers or vanpoolers. Staff members with similar geographic home locations will be asked to partake in the social gatherings where food and refreshments will be provided to all participating in the event. The Transportation Program Manager will be responsible for coordinating with Human Resources



to gather up to date information related to staff members home zip codes. The information will be used to identify clusters of employee home locations or areas of opportunity for ridesharing. Furthermore, the Transportation Program Manager will be responsible for scheduling information sessions with organizations or providers who have knowledge and experience with vanpool and carpool programs. These sessions will be scheduled by the end of 2008 and will continue at a minimum on an annual basis. The goal of the information sessions is to educate staff members on the benefits, increase awareness of commuting alternatives and assist in achieving the outlined goals for ridesharing membership.

- Local and Regional Transportation Involvement: There are several committees and organizations that the Transportation Program Manager will become a member of by the end of 2008.
 - Rideshare Coordinators Meetings: These meetings are held quarterly at the Montgomery County Transit Services office and bring together a host of local “Rideshare Coordinators” or Transportation Program Managers. The meetings allow the Rideshare Coordinators to share best practices on how they have helped to educate their staff members on commuting alternatives and achieved significant reductions in Single Occupancy Vehicle commuting. Furthermore, the meetings discuss local events and concerns that affect the daily commuters within the area.
 - MWCOG – Transportation Planning Board: The board is a federally designated planning organization and plays an important role in regional transportation. The board is comprised of members from local governments, transportation agencies, federal agencies, the airport authority and WMATA. The board prepares plans of action for the regional area which require approval from the federal government. Attending these meetings will help identify potential programs which may be beneficial for NNMC and the region. NNMC will be provided the option to publicly comment, will notify staff members of the impending programs and discuss the relevancy of those programs to their daily commute.
 - ACT (Association for Commuter Transportation): ACT is an organization that works with Transportation Program Managers and places of employment to limit traffic volume, conserve energy and to exceed air quality standards. ACT provides various resources to its members to help achieve these goals and has established regional chapters which allow the community to focus their efforts on local concerns.
- Focus Groups: Focus groups are an important method to receive unfiltered feedback from staff members. A focus group is a small group of persons (8 to 12) that is selected to represent a cross-section of a large group and assembled to discuss a particular problem, issue, or idea.



While surveys focus more on determining quantitative measures of employee behavior, focus groups can better reveal qualitative factors in employee commuting decisions.

Focus groups are developed as a survey technique by companies testing new products before they are released to the market place. Be aware that you can expect to get a slightly higher approval/participation rate from the focus group testing than you will when the idea is actually implemented. The focus group is excellent for testing out new ideas (i.e. get employees reaction), such as a new shuttle bus program or guaranteed ride home program.

Focus group interviews are used as a way of facilitating an understanding of employee needs and feelings towards the commute to work and alternatives to the single occupant vehicle. Focus groups can reinforce the importance of talking with employees in a one-on-one or small group manner to aid project design. As a direct outcome of these sessions, the commute alternatives can be better delineated, the reasonableness of the values of each alternative's attributes confirmed, and the clarity of the survey instruments improved.

Once a month, beginning in 2009, the Transportation Program Manager will meet with a random focus group, assigned by the Human Resources Department, to listen to their questions and concerns as they relate to commuting, transportation and parking at NNMC. Focus groups will also include staff members from tenants such as USUHS, AFFRI, JTF, NEX and MWR. Action plans will be formulated from these focus groups and the results will be shared with the entire staff at NNMC.

- State of the Union: The Transportation Program Manager will be responsible for providing a State of the Union report to the Command leadership of NNMC on an annual basis. The first State of the Union report will occur in 2009. The report will include key information and analysis to include staff survey data, focus group feedback, traffic counts and historical trend data (to include Metrochek distribution totals, rideshare, telecommute/telework and flex/compressed work week membership). Furthermore, discussion will include key initiatives and goals for the up and coming year.
- Transit Amenities and Subsidies: The NNMC campus is situated adjacent to the Medical Center Metrorail Station. The campus has very easy access to WMATA and Montgomery County Ride-On bus transit routes along Rockville Pike (MD 355) and Jones Bridge Road. However, there is the need to increase the convenience for staff members to pursue mass transit service, and reduce SOV commuting to NNMC. Below are some initiatives that the Transportation Program Manager will pursue by the end of 2010.
 - Express Bus Services: The Transportation Program Manager will work with county and state transit departments to identify "Express Bus Services" which may be beneficial for



- NNMC commuters. Express Bus Service locations will be identified by staff home zip code location. Dense clusters of staff home zip codes will highlight areas which offer the best opportunity for productive use of Express Bus Services. The Transportation Program Manager will identify these locations and coordinate with county and state transit departments by the end of 2009.
- On Campus Bus Services: Prior to Sept 11, 2001, there were outside bus providers (Metro) which serviced the NNMC campus. Various stops were located throughout NNMC and would conveniently transport patient, visitor and staff members to and from the campus. Unfortunately, increased security measures did not allow for these operations to be utilized any longer and services were discontinued. However, these services were in the best interest of patients, visitors and staff members who were coming to NNMC. The Transportation Program Manager will work closely with the Security Director for NNMC, the Command Leadership of NNMC and county/state transit providers to institute these services once again. Full evaluation of these options will take significant time and the Transportation Program Manager will have two years to have successfully explored this option.
 - NNMC Shuttle Bus Services: The Transportation Program Manager will study the feasibility of further enhancement to the shuttle bus system. Depending on patient and visitor ridership it may be necessary to institute a shuttle bus service which operates throughout normal business hours, Monday – Friday. A decision on this matter will be made within the next two years as the impact of increased patient volume will certainly occur. In addition, the Project Manager will be responsible for bi-annual ride-alongs on the shuttle bus routes beginning in 2008. The Project Manager will retain valuable feedback from riders and operators in order to adjust the existing system to provide the optimal travel experience.
 - Base Transportation Committee (BTC): The Transportation Program Manager will be tasked with forming the BTC within the next year. The BTC would work together to define and address commuting and transportation related concerns from patients, visitors and staff members. The committee would meet quarterly and would consist of the Transportation Program Manager, Safety, Facilities, Security, Fire Department, USUHS, AFFRI, JTF, NEX and MWR at a minimum.
 - NNMC Tenants: NNMC tenants comprise a significant portion of the commuters to the campus on a daily basis. As a result, it is important that these tenants, and their staff, have all the latest information regarding effective transportation demand management programs. Therefore, the Transportation Program Manager will identify key points of contact at the major tenants on the facility to include USUHS, AFFRI, JTF, NEX and MWR. The Transportation



Program Manager will ensure that these points of contact are provided with NNMC staff updates to include Town Hall recaps, notification of informational sessions (ex. Carpooling or vanpooling programs), invitation to the BTC and periodic notifications of transportation and commuting related issues involving NNMC. The Transportation Program Manager will be responsible for developing these relationships within the next year.

5.2.1 External TMP Factors

- Purple Line Project: The Maryland Transit Administration (MTA) is currently undertaking studies to establish a Purple Line light rail or bus rapid transit connection between the New Carrollton Metrorail Station (in Prince George's County) and the Bethesda Metrorail Station (in Montgomery County). The Purple Line route would also run through Silver Spring where most of the WRAMC employees live, and a potential alignment would be along Jones Bridge Road to the Medical Center Metrorail Station and south along Woodmont Avenue to the Bethesda Metrorail Station as shown in Figure 7. Implementation of the Purple Line Project, in either the light rail or bus rapid transit format, would be beneficial addition to the regional transit system and the commuters to NNMC. The Transportation Program Manager will work closely with the Maryland Transit Administration to further approval of this project.
- The Washington Metropolitan Area Transit Authority (WMATA) Station Access: WMATA is conducting a station area access study including the potential provision of an east side/NNMC station portal and a pedestrian tunnel connecting NIH and the bus station to the NNMC campus. This project would enhance public safety, by reducing the pedestrian/vehicular conflicts that result from crossing Rockville Pike. It would also improve the overall operational efficiency of the South Wood Road/Rockville Pike intersection. The project would require close cooperation with WMATA. If the project is certified by the DAR program, the Navy commits to seek funding from DoD and its execution will be subject to the availability of funding through the DoD budget process. If funding is not approved, the Program Manager will support transit and pedestrian improvements and will work closely with WMATA regarding their study findings, public feedback and final recommendations.

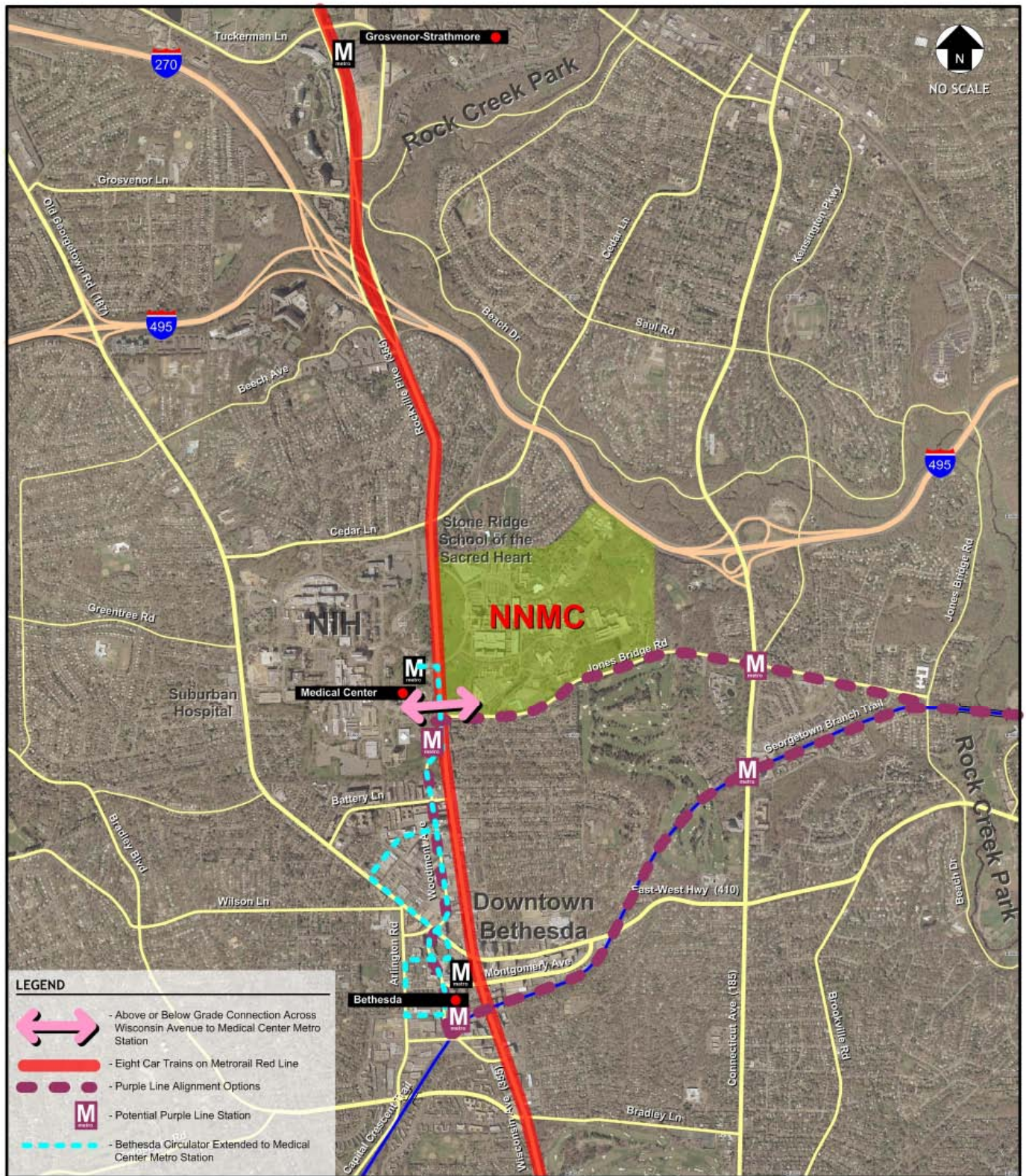


Figure 7 - Greater NNM Study Area Transit and Shuttle Improvements



- Bicycle/Pedestrian Improvements: The use of alternative travel modes will be promoted through the provision of bicyclist amenities (on-campus Class II or III bikeways and connections to area Class I bikeways, area bicycle network maps and wayfinding signage, racks, bike lockers, and showers located at key locations). The NNMC will support the provision of a Metrorail entrance on their side of 355/Rockville Pike, with a pedestrian link below ground between the NIH/Metrobus area and the NNMC Metrorail portal. These improvements will increase the use of Metrorail and Metrobus services and eliminate pedestrian/bicyclist crossings and related safety hazards along Rockville Pike. Finally, the Transportation Program Manager will support County efforts to provide improved off-campus paths, sidewalks, and crossings to better connect employees, lodgers, and visitors to Downtown Bethesda. The Transportation Program Manager will encourage participation in the County's annual Bike-to-Work Day event.

5.2.2 Other Potential TMP Measures

The following measures were considered but not adopted:

- Parking Cash-Out Program: This involves assigning a value to each parking space and paying employees for not using it. This would be a suitable alternative to reducing the number of parking spaces on the campus, however this option can not be practiced since there is no charge for parking and paid parking is not authorized for DoD facilities.
- Fringe Parking: The NNMC will support a feasibility study for the provision of fringe parking lots for use by NNMC employees, with shuttle bus connections to the campus. M-NCPPC transportation staff has identified two parcels of land owned by the State which could be developed for fringe parking. These parcels are located within the northeast quadrant of the I-495 at Connecticut Avenue Interchange. A preliminary study conducted by M-NCPPC staff indicates that the total capacity of the lots may be approximately 250 spaces. These facilities would reduce NNMC employee trips and related local area congestion impacts. However, the Navy can neither fund the development of such facilities nor run shuttles between the campus and any fringe parking site due to DOD regulations. Hence, this recommendation will not be feasible in the future.

5.2.3 TMP Best Practices

The foregoing sections of this document highlighted the existing transportation conditions on the NNMC campus, the set TMP goals and objectives, and the existing and future TMP implementation. The Transportation Program Manager will be responsible for implementing, evaluating and monitoring the TMP, and will



undertake these tasks in accordance with the guidance provided in the GSA/MWCOG/NCPC Handbook (2008).

The expected surge in employee population would be completed in 2011, and the expanded population would be maintained over the next five years (i.e., unto 2016). As the number of employees increases at the NNMC, the possibility of establishing additional carpools and vanpools should increase to enhance the success of the TMP. The Transportation program Manager would seek the opportunity to promote carpools, vanpools and other programs by undertaking several tasks, many of which were noted above. Strong consideration will be given also to the following:

Transportation Program Manager

- Work with the relocated staff prior to moving to identify ridesharing, transit and other alternative mode opportunities.
- Develop a package for distribution to all employees and perspective hires providing information on alternative travel options.
- Setup locations across the campus where all TMP information will be located and be easily accessible to employees.
- Setup a site on the NNMC intranet so that employees can access transportation information online.

Carpooling

- Offer “Zip Code Get Togethers” to bring together and introduce people from the same neighborhood or zip code.
- Meet all the new employees and introduce them to the ridesharing program.
- Introduce potential carpoolers to each other.
- Schedule presentations for different departments.
- Refer potential ridesharers to existing carpools.
- Let the employees know that the Transportation Program Manager is available to assist them and that they have an “open door” policy.
- Inform carpoolers that parking would be provided for carpool vehicles and that the parking will be located conveniently with respect to building entrances.



Vanpooling

- Identify potential vanpoolers based on a plot of employee residences (i.e., density map), an employee survey, or review of employee records.
- Develop employee interest by announcing potential routes.
- Determine potential demand by meeting with identified potential candidates. Combine with “Zip Code Get Togethers”.
- Identify possible drivers among the potential vanpoolers.
- Describe the program components such as cost, insurance, maintenance, etc.
- Select drivers and back-ups.
- Provide on-going assistance once the program is operational and track the ridership.
- Inform vanpoolers that vans would be provided conveniently located parking.

Transit

- Evaluate the potential for transit usage by assessing access and system availability between employee homes and the work site.
- Provide transit information on routes, schedules, fares, both in hardcopy form and on the NNMC website. Customize this to the worksite by setting up a map showing appropriate routes and schedules.
- Provide Mass Transportation Fringe Benefit (MTFB) information, and highlight the monthly reimbursement amount (\$115) via email, flyers, etc.
- Assist in initial trip planning by identifying routes and schedules for employees.
- Promote the transit program by distributing marketing materials and by featuring articles on transit riders in the employee newspaper or other federal agency publications.

Bicycling / Walking

- Provide maps identifying bike routes and walking paths both in hardcopy form and on the NNMC website.
- Provide bicycle parking that will protect the bikes from the weather and from theft and



vandalism.

- Provide showers and lockers for bicyclists and walkers.
- Provide literature on bicycling safety.

Parking Management

- Assign priority spaces to carpool and vanpool vehicles, and provide this information on the NNMC website.
- Rigidly monitor and enforce the use of designated spaces through coordination with the Security Office.
- Implement parking control measures such as ticket validation, electronic identification cards, parking permits, reserved signage, parking tickets/fines.

Variable Work Hours

- Determine employee interest by surveying employees or meeting with representatives from different departments.
- Select the appropriate program that has the most realistic chance of success.
- Solicit management support for the program of choice.
- Appoint a project coordinator. This can be the Transportation Program Manager.
- Develop formal policies for the program through a proposal that describes the rules. Rules are necessary for all logistical issues such as: banking of hours, work day start and end period, core hours, core days, coverage, supervision, etc.
- Review the operational needs of the agency's work units. This includes phone operations, inter-office mail, computer support, etc.
- Identify eligible employees. Some employees may be excluded because they perform vital functions that require their presence during regular business hours.
- Hold informational sessions for supervisors and employees to explain the policies and procedures.
- Address individual concerns and hardships for those who may not be able to participate.



- Start the program by posting employee schedules and by setting a kick-off date.

5.3 TMP Modal Split Implementation

The modal split changes required to achieve the NCPC parking ratio (i.e., one space for every three employees) are illustrated in Table 15.

Table 15 Future Staff Mode Split

Travel Mode	2007 Survey	Projected 2011		Projected 2016	
		% of Employees	Parking	% of Employees	Parking
Drive Alone	72.4%	28%	2,671	28%	2,671
Carpool	8.8%	15%	484 ¹	15%	484 ¹
Vanpool	4.7%	9%	124 ²	9%	124 ²
Transit	11.3%	30%	–	30%	–
Walk/Bike/Drop Off	2.3%	10%	–	10%	–
Absentees/Travel/Deployed/Flex Time/ Telework ³	N/A	8%	–	8%	–
	Total	100%	3,279	100%	3,279

Notes:

1. Assumed an average of 3 persons per carpool
2. Assumed an average of 7 persons per vanpool
3. Assumed approximately 2% employees involved in Flextime/Telework programs, and provided 60% parking for this population in the drive alone category.

This table was developed based on the following factors:

- The parking supply of 3,279 spaces satisfies the NCPC parking ratio.
- Reasonable assumptions for distributing this supply among the employees and modes that would require on-campus parking. These modes are drive alone, carpool and vanpool. Trip distribution assumptions were based primarily on the results of the 2007 Employee Transportation Survey (see Table 12).
- Reasonable assumptions for the projected use of alternative travel modes (transit, walk, bike, drop-off), based on the results of the 2007 Employee Transportation Survey (see Table 13).

The influx of personnel occurring in 2011 will make maintaining the ratio achieved in early 2011 a goal. Hence the ratios would not change between 2011 and 2016. This table indicates that transit usage, for instance, would need to increase from 11.3% to approximately 30% by 2011. This would require a very aggressive implementation of the selected TMP measures. A 2005 *Washington Post* article⁴ notes that the majority (91%) of the commuters in the Washington Metropolitan Area do not

⁴ “<http://www.washingtonpost.com/wp-dyn/articles/A10450-2005Mar5.html>”



use the WMATA Metrorail system, the second busiest in the nation. Approximately 30% reported that they could but choose not to, while nearly 60% indicated that public transportation isn't an option for them. Their reasons varied: Metro is too far from home or from work, or they simply prefer to drive. However, the assumed 30% increase in transit use could be achieved with major transit infrastructural improvements including the following:

- Purple Line. This project would be very beneficial since most of the new employees currently live in the area of Silver Spring (Maryland).
- Pedestrian Bridge/Tunnel. This project would increase transit and walk shares by providing a safe connection between the Medical Center Station rail/bus facilities and the NNMC .
- Metro Kiss-and-Ride Facility. NNMC employees will have access to the kiss-and-ride facility at the Medical Center Metrorail Station which will be improved by WMATA to provide greater capacity.

5.4 TMP Monitoring and Evaluation

The GSA/WWCOG/NCPC Handbook indicates that in order to maintain a successful TMP, implementation alone is not sufficient. The TMP will be monitored, evaluated, and restructured as necessary in order to be effective. A successful evaluation methodology will use procedures that determine one or more of the following:

- The extent to which the program has achieved its stated objectives (e.g., increases in AVO).
- The extent to which the accomplishment of the objectives can be attributed to the program (direct and indirect effects).
- Degree of consistency between program implementation and the plan (relationship of planned activities to actual activities).
- The relationship of different tasks to the effectiveness of the program (productivity).

Some of the most commonly used methods involve employee surveys, program participation documentation and time sheets/activity logs, vehicular trip generation counts, vehicular occupancy surveys and the monitoring of transit and shuttle bus ridership. The following basis will be used to measure the effectiveness of the TMP strategies identified:

- Employee Parking Ratio
- Average Vehicle Occupancy (AVO)



- Non-Auto Drive Mode Share (NADMS)
- Vehicle Trip Reduction
- Mode Split
- MTFB Participation

The **Employee Parking Ratio** represents the ratio of vehicle parking space per employee. The goal for the employee Parking Ratio is one space for every three employees, as defined and required by NCPC. The Ratio is calculated as follows:

Employee Parking Ratio = No. of employee parking spaces at the worksite/No. of employee at the worksite

The **AVO** represents the ratio of employees to vehicles. The goal will be to raise the AVO from 1.12 to 3.0 by year 2011. The ratio is calculated as follows:

AVO = No. of employees at the worksite/No. of vehicles at worksite

The **Non-Auto Driver Mode Share (NADMS)** represents the ratio of all non-auto related commuting options (ex. walking, biking, mass transit) to all commuting options. The goal will be to increase the NADMS from 27.6% to 72% by year 2011. The NADMS is calculated as follows:

NADMS = All non-auto driver related commuting options/All commuting options

Vehicle Trip Reduction measures the number of trips into/out of the site. VT reduction can be measured as a daily total or peak hour total. As the TMP strategies are implemented, assessment of VT can help determine the impact of the strategies. Furthermore, this method can be fairly quick, unobtrusive, and cost effective due to the fact that there will only five access points to the NNMC. Sensors can be laid at the entrance points to determine how many vehicles are entering and exiting the site, and this can be repeated on a regular basis.

Mode Split is the percentage of people using each mode of travel.

The NNMC monitoring survey will be done every year and its detailed evaluation program in accordance with those requirements will be implemented every two years, beginning in 2009. Required adjustments would be made to enhance the effectiveness of the TMP measures. The data for this program will be generated by a 3rd party contractor, hired by NNMC, to conduct the traffic counts, visually inspect the parking throughout the campus and review survey data.